

Amendments to the Claims

Please replace the Claims as shown below:

1. (Canceled)

2. (Currently Amended) The method as recited in Claim 6, wherein said selecting characteristics ~~step further~~ further comprises ~~the steps of:~~

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;

accessing a database;

retrieving from said database historical bids data;

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;

outputting said bids data; and

outputting said auction characteristics data.

3. (Currently Amended) The method as recited in Claim 6, wherein said selecting a relevant bidding model ~~step further~~ further comprises ~~the steps of:~~

receiving said auction characteristics data;

accessing a database;

retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said relevant bidding model.

4. (Currently Amended) The method as recited in Claim 6, wherein said estimating ~~step further~~ further comprises ~~the steps of:~~

receiving said relevant bidding model;

receiving bids data;

~~expressing unobservable variables in terms of observable bids;~~

transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;

estimating an estimated latent structure of said market, wherein said ~~estimating~~
~~comprises sample of inverted bids receives~~ application of statistical density estimation
techniques to obtain said estimated structure; and
outputting said estimated structure.

5. (Currently Amended) The method as recited in Claim 6, wherein said
bidding model has embedded an unknown structure, and wherein said predicting a
bidding behavior ~~step further~~ further comprises the steps of:

receiving said estimated structure;
receiving said relevant bidding model;
substituting said estimated structure for said unknown structure; and
outputting a prediction of bidding behavior.

6. (Currently Amended) A method for determining a reserve price for a
market, said method comprising the steps of:

selecting characteristics of said market;
selecting a relevant bidding model;

estimating a structure of said market, said estimating comprises expressing
unobservable variables in terms of observable bids, wherein said unobservable
variables are expressed in terms of observable bids by inverting said bid model;

predicting a bidding behavior;

predicting a first outcome of said market; and wherein said ~~predicting a first
outcome comprises the steps of:~~

~~receiving a second user input, wherein said second user input
comprises:~~

~~an evaluation criterion;
a candidate reserve price; and
a constraint;~~

~~receiving said estimated structure;~~

~~receiving said bidding behavior prediction for said candidate reserve
price, wherein said bidding behavior prediction further comprises a prediction under
said constraint;~~

~~_____ obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome; and~~

~~_____ outputting said value; and~~
evaluating said first outcome of said market.

7. (Currently Amended) The method as recited in Claim 6, wherein said evaluating said first outcome ~~step further~~ further comprises the steps of:

receiving a third user input, wherein said third user input comprises a plurality of candidate reserve prices;

receiving a predicted outcome for each said candidate reserve price;

calculating descriptive statistics for each said candidate reserve price, wherein said descriptive statistics comprise a mean and a variance;

ranking each said candidate reserve price with respect to said calculated mean and generating corresponding rankings for said plurality; and

outputting said descriptive statistics and said rankings.

8. (Currently Amended) The method as recited in Claim 7, further comprising ~~the steps of:~~

selecting a best reserve price, wherein said best reserve price comprises the candidate reserve price within said plurality having the highest said ranking; and

outputting said best reserve price.

9. (Canceled)

10. (Currently Amended) The system as recited in Claim 14, wherein said selecting characteristics ~~step of~~ of said method further comprises the steps of:

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;

accessing a database;

retrieving from said database historical bids data;

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;
outputting said bids data; and
outputting said auction characteristics data.

11. (Currently Amended) The system as recited in Claim 14, wherein said selecting a relevant bidding model ~~step of~~ of said method further comprises ~~the steps of~~:

receiving said auction characteristics data;
accessing a database;
retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and
outputting said relevant bidding model.

12. (Currently Amended) The system as recited in Claim 14, wherein said estimating ~~step of~~ of said method further comprises ~~the steps of~~:

receiving said relevant bidding model;
receiving bids data;
~~expressing unobservable variables in terms of observable bids;~~
transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;
estimating an estimated latent structure of said market, wherein said ~~estimating comprises~~ sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and
outputting said estimated structure.

13. (Currently Amended) The system as recited in Claim 14, wherein said bidding model has embedded an unknown structure, and wherein said predicting a bidding behavior ~~step of~~ of said method further comprises ~~the steps of~~:

receiving said estimated structure;
receiving said relevant bidding model;
substituting said estimated structure for said unknown structure; and

outputting a prediction of bidding behavior.

14. (Currently Amended) A computer system comprising:

a bus;

a memory interconnected with said bus; and

a processor interconnected with said bus, wherein said processor executes a method for determining a reserve price for a market, said method comprising the steps of:

selecting characteristics of said market;

selecting a relevant bidding model;

estimating a structure of said market, said estimating comprises expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model;

predicting a bidding behavior;

~~predicting a first outcome of said market, wherein said predicting a first outcome comprises the steps of:~~

~~_____ receiving a second user input, wherein said second user input comprises:~~

~~_____ an evaluation criterion;~~

~~_____ a candidate reserve price; and~~

~~_____ a constraint;~~

~~_____ receiving said estimated structure;~~

~~_____ receiving said bidding behavior prediction for said candidate reserve price, wherein said bidding behavior prediction further comprises a prediction under said constraint;~~

~~_____ obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome; and~~

~~_____ outputting said value; and~~

evaluating said first outcome of said market.

15. (Currently Amended) The system as recited in Claim 14, wherein said evaluating said first outcome ~~step-of~~ of said method further comprises ~~the steps-of~~:
receiving a third user input, wherein said third user input comprises a plurality of candidate reserve prices;
receiving a predicted outcome for each said candidate reserve price;
calculating descriptive statistics for each said candidate reserve price, wherein said descriptive statistics comprise a mean and a variance;
ranking each said candidate reserve price with respect to said calculated mean and generating corresponding rankings for said plurality; and
outputting said descriptive statistics and said rankings.

16. (Currently Amended) The system as recited in Claim 15, wherein said evaluating said first outcome ~~step-of~~ of said method further comprises ~~the steps-of~~:
selecting a best reserve price, wherein said best reserve price comprises the candidate reserve price within said plurality having the highest said ranking; and
outputting said best reserve price.

17. (Canceled)

18. (Currently Amended) The computer readable medium as recited in Claim 22, wherein said selecting characteristics ~~step-of~~ of said method further comprises ~~the steps-of~~:

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;
accessing a database;
retrieving from said database historical bids data;
retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;
outputting said bids data; and
outputting said auction characteristics data.

19. (Currently Amended) The computer readable medium as recited in Claim 22, wherein said selecting a relevant bidding model ~~step-of~~ of said method further comprises ~~the steps of~~:

receiving said auction characteristics data;

accessing a database;

retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said relevant bidding model.

20. (Currently Amended) The computer readable medium as recited in Claim 22, wherein said estimating ~~step-of~~ of said method further comprises ~~the steps of~~:

receiving said relevant bidding model;

receiving bids data;

~~expressing unobservable variables in terms of observable bids;~~

transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;

estimating an estimated latent structure of said market, wherein said estimating comprises sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and

outputting said estimated structure.

21. (Currently Amended) The computer readable medium as recited in Claim 22, wherein said bidding model has embedded an unknown structure, and wherein said predicting a bidding behavior ~~step-of~~ of said method further comprises ~~the steps of~~:

receiving said estimated structure;

receiving said relevant bidding model;

substituting said estimated structure for said unknown structure; and

outputting a prediction of bidding behavior.

22. (Currently Amended) A computer readable medium for causing a computer system to execute ~~the steps in~~ a method for determining a reserve price for a market, said method comprising ~~the steps of~~:

selecting characteristics of said market;

selecting a relevant bidding model;

estimating a structure of said market, said estimating comprises expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model;

predicting a bidding behavior;

~~predicting a first outcome of said market, wherein said predicting a first outcome of said market comprises the steps of:~~

~~_____ receiving a second user input, wherein said second user input comprises:~~

~~_____ an evaluation criterion;~~

~~_____ a candidate reserve price; and~~

~~_____ a constraint;~~

~~_____ receiving said estimated structure;~~

~~_____ receiving said bidding behavior prediction for said candidate reserve price, wherein said bidding behavior prediction further comprises a prediction under said constraint;~~

~~_____ obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome; and~~

~~_____ outputting said value; and~~

evaluating said first outcome of said market.

23. (Currently Amended) The computer readable medium as recited in Claim 22, wherein said evaluating said first outcome ~~step of~~ of said method further comprises ~~the steps of~~:

receiving a third user input, wherein said third user input comprises a plurality of candidate reserve prices;

receiving a predicted outcome for each said candidate reserve price;

calculating descriptive statistics for each said candidate reserve price, wherein said descriptive statistics comprise a mean and a variance;

ranking each said candidate reserve price with respect to said calculated mean and generating corresponding rankings for said plurality; and

outputting said descriptive statistics and said rankings.

24. (Currently Amended) The computer readable medium as recited in Claim 23, wherein said evaluating said first outcome ~~step of~~ of said method further comprises ~~the steps of~~:

selecting a best reserve price, wherein said best reserve price comprises the candidate reserve price within said plurality having the highest said ranking; and

outputting said best reserve price.

25. (New) The method as recited in Claim 6, wherein said predicting a first outcome further comprises:

receiving a second user input, wherein said second user input comprises:

an evaluation criterion,

a candidate reserve price, and

a constraint;

receiving said estimated structure;

receiving said bidding behavior prediction for said candidate reserve price, wherein said bidding behavior prediction further comprises a prediction under said constraint;

obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome; and

outputting said value.

26. (New) The system as recited in Claim 14, wherein said predicting a first outcome of said method further comprises:

receiving a second user input, wherein said second user input comprises:

- an evaluation criterion,
- a candidate reserve price, and
- a constraint;

receiving said estimated structure;

receiving said bidding behavior prediction for said candidate reserve price, wherein said bidding behavior prediction further comprises a prediction under said constraint;

obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome;

and

outputting said value.

27. (New) The computer readable medium as recited in Claim 22, wherein said predicting a first outcome of said method further comprises:

receiving a second user input, wherein said second user input comprises:

- an evaluation criterion,
- a candidate reserve price, and
- a constraint;

receiving said estimated structure;

receiving said bidding behavior prediction for said candidate reserve price, wherein said bidding behavior prediction further comprises a prediction under said constraint;

obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate reserve price, and said constraint, said value comprising said first predicted outcome;

and

outputting said value.